

TITLE: Water Distribution Technician II

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DEPARTMENT: Environmental ServicesREPORTS TO: Water Operations SupervisorSUPERVISES: Provides lead direction to other Technicians or Public Utility WorkersDEFINITION:

Under minimal supervision, performs functions related to the operations and maintenance of the City's water distribution system. The work is characterized as skilled technical work including monitoring, troubleshooting, inspecting and repairing water distribution facilities and equipment. The position is also responsible for operating and maintaining the computerized telemetry system. Serves as lead worker on a project basis.

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from other classes in the Public Utility Worker series by the responsibilities for the SCADA system. (Supervisory Control and Data Acquisition computer software.) Performance of the full range of journey level installation, maintenance, and repair activities for City water distribution systems and facilities would also be expected of employees in this class, along with the ability to operate a variety of light and heavy equipment as needed or directed.

ESSENTIAL JOB FUNCTIONS-- (Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)

Maintains, troubleshoots and repairs equipment and machinery of the City water distribution system including the computerized telemetry system, pump stations, metering stations, reservoirs, pressure reducing stations and other related equipment. Repairs or replaces control valves both electrically and hydraulically operated. Identifies, coordinates and schedules repairs carried out by contractors or work crews.

Performs regularly scheduled and preventative maintenance of equipment and facilities.

Monitors and maintains system performance levels and responds to and corrects telemetry system alarms, power failures, communication failures, pump failures and other problems related to system operation.

Utilizes computer technology and programs to collect, analyze, report on and make decisions based on statistical data relating to the operation of the city water system.

Operates and maintains the computer software applications of the telemetry system (SCADA). Learns and implements new applications as needed. Reviews and modifies programs to increase operating efficiency and incorporate new monitoring requirements and parameters. Implements upgrades as purchased and installed.

Utilizes electronic analysis equipment to monitor operation of pumping equipment and maintain records to be used in a predictive maintenance program.

Responsible for monitoring, maintaining, and operating a chlorinator and chlorinating booster station and related equipment.

Troubleshoots communication equipment at remote sites working with vendors when necessary.

Participates in developing regional inter-governmental peak water demand strategies.

Responds to customer inquiries regarding water pressure and assists with other complaints and inquiries related to the water system.

Uses a variety of hand and power-operated tools and equipment such as shovels, picks, hand and small riding mowers, tapping machine, power hacksaw, drills, jackhammer, welders, compressor and portable concrete saw.

Operates all departmental heavy equipment as required by assigned work and projects.

Provides lead direction to assigned Public Works personnel, plans and makes work assignments and trains personnel as needed. Assures that work is performed according to established safety practices and procedures.

OTHER JOB FUNCTIONS

Directs field operations of the seasonal Water System Flushing Program. Complies with and implements mandates for discharge of chlorinated water.

Analyses and recommends rate setting strategies for peak usage to achieve the best peaking factors for the distribution system capacity.

Rotates on call duty with other trained telemetry staff personnel.

WORKING CONDITIONS:

Most duties are performed in an office or indoor environment, but significant time is spent working outdoors in varying and extreme weather conditions, with physical hazards. Physical effort may be required to perform heavy manual labor in confined and cramped spaces and uncomfortable positions. Regular lifting of objects and equipment ranging in weight from 25 to 100 lbs. is required. Subject to 24-hour call back for emergency conditions.

QUALIFICATIONS:

Knowledge of:

- Methods, practices, tools and materials used in mechanical and electrical maintenance of water service pumps, motors, valve systems, regulators, meters and related equipment.
- Hydraulics, including principles of operation of various types of pumps and factors affecting pump performance.
- Mathematics of hydrology typically requiring knowledge of algebraic formulas.
- Computerized telemetry systems software and capabilities.

- Personal computer familiarity including standard word processing and spreadsheet applications.
- Work hazards and applicable safety precautions.
- Electronic instrumentation systems and components.

Ability to:

- Operate and use electro/mechanical test equipment used to troubleshoot or maintain equipment.
- Recognize, diagnose and adjust malfunctioning equipment and defects in electrical and mechanical systems.
- Read meters and charts and keep accurate records of data.
- Analyze technical data and recommend or take action based on analysis.
- Read, understand and interpret blueprints, sketches, computer software instructions and schematic diagrams.
- Learn new software and computer applications. Operate a personal computer.
- Successfully convey technical information to customers.
- Operate heavy equipment and power tools used in public works maintenance operations.
- Perform heavy manual work under confined and uncomfortable conditions.
- Communicate effectively, both orally and in writing.
- Establish and maintain effective working relationships with other employees.
- Plan, assign and monitor and lead the work of others and work independently to accomplish work assignments.
- Physical ability to perform the essential functions of the job.

Education and Experience -- Any equivalent combination of education and experience which provides the applicant with the knowledge, skills, and abilities required to perform the job. A typical way to obtain the knowledge and abilities would be:

High School diploma or G.E.D. and three years directly related public works maintenance or construction experience in a water distribution operation, with one year experience operating SCADA computer programs.

Licenses, Certificates, and Other Requirements:

Valid driver's license

One or more of the following certificates may be required depending upon area of assignment:

Valid Commercial driver's license with appropriate endorsement
Level 2 Water Distribution Certification
Limited Electrical Maintenance License
Pesticide Spray Applicators License
First Aid and CPR Certification

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